Appendix A

Allowable and Unallowable Costs

This appendix includes a chapter from the Public Health Service (PHS) Grants Policy Statement and provides guidance on what is allowable and unallowable as costs for the Grants for Special Diabetes Programs for Indians. There have been a number of specific costs that have been questioned as to allowability under this program. They are as follows:

Alteration and Renovation (A&R)-----ALLOWABLE in accordance with the PHS Grants Policy Statement. Note that the amount that may be used for A&R is limited to the lesser of $150,000 or 25% of the total funds expected to be awarded for direct costs under the grant for three consecutive budget periods. If a grantee is to request A&R, the renovations must be to an existing building that is to be used for the diabetes project and that is suitable for human occupancy. Additional documentation is required for the IHS to approve requested A&R, in excess of $50,000, i.e., line drawings of existing space and proposed changes. See pages 7-2 to 7-4 for specific requirements. If the space is leased that will be altered/renovated, the length of the lease should allow for its use for the entire period of the grant award.

Construction-----UNALLOWABLE. The program legislation, Section 330C of the Public Health Services Act, as amended, does not authorize construction (see page 7-5 for definition). Building a jogging/running track or a swimming pool are considered construction and are unallowable. If you have tribal or other Federal monies available that may be used for construction, you may include them as a tribal contribution to the grant and use them.

Other Expenses-----ALLOWABLE. Grant funding may be used to pay subjects to complete a survey that will collect information on diabetes issues, e.g., life style preferences. A minimal payment (not to exceed $15 per individual completing a survey) is allowable. The grantee should keep a listing of subjects who were paid for their participation.

Supplies-----ALLOWABLE. For purposes of this diabetes program, incentive items may be purchased with grant funding for participants in such activities as health fairs, fitness programs, fun runs, etc. Items must be of nominal value (less than $10/per item) such as caps, T-shirts, water bottles, and posters. **Cash prizes or gifts are not allowable.**

Rental or Lease of Facilities and Equipment-----ALLOWABLE. Rental or lease is allowable if the space or item is necessary to carry out the grant program and the costs are reasonable (see page 7-11). The IHS is neither a party to the lease agreement nor responsible for conditions, terms, or payment of rents or leasing fees.

Trailers and Modular Units-----ALLOWABLE FOR TRIBES AND URBANS. Under this grant program, these units are considered as equipment to be used at a given location site for the project period of the grant only. **Such units are not to be permanently installed.** The grantee must obtain a Government-issued revocable license if the proposed site is located on federally owned or managed land. See pages 7-13 to 7-14.

The **IHS entities** serving as grantees must contact the Area Realty Officer or Ms. Eleanor Matney, Principal Realty Officer, Division of Facilities and Environmental Engineering, at (301) 443-5954 regarding use of rental space or trailers/modular units. These IHS entities must comply with Federal policies.

Appendix B

PHS Grant Policy Statement, Cost under PHS Grant-Supported Project/Activities

Appendix C

Environmental Compliance Fact Sheet for IHS Grants (This requirement applies to all IHS Grants.)

IHS diabetes grant proposals are subject to National Environmental Policy Act (NEPA) review by IHS, with assistance from the grantee (42 U.S.C. 4332), as well as grantee compliance with all applicable environmental laws and regulations as referenced in the form SF 424B Assurances for Non-Construction Programs, item 11, and other related grant conditions. While grants for patient care services may not have environmental impacts, any grant that includes building, remodeling, excavation, purchasing modular structures, change of land use, and related project activities requires documentation of an environmental review in accordance with NEPA. Please refer to the attached Environmental Information and Documentation form for a list of common environmental considerations for this grant. The applicable IHS NEPA policy is based on the President's Council on Environmental Quality (CEQ) regulations, the Department of Health and Human Services (HHS) policy (General Administrative Manual, Part 30), and the Public Health Service (PHS) Grants Policy Statement.

The correct level of NEPA analysis and documentation required for a proposed IHS grant or other IHS action is based on the level of significance of the anticipated environmental impacts. For example, any construction-type activity is considered a major Federal action which requires more investigation and analysis than routine patient care activities.

Responsibility and Authority
Grant proposal must include a completed Environmental Information and Documentation form. All IHS Area Directors and program managers are responsible for compliance with all applicable environmental laws, regulations, and Executive Orders for IHS funded grants and any other activities that require IHS concurrence. Please contact your Area NEPA coordinator for assistance in assessing NEPA and related environmental impacts.

In addition, grantees are required to comply with applicable Federal, tribal, state, or local environmental laws and regulations, including those listed on form SF 424B in item 11 and other listed conditions.

Environmental Analysis Should Begin Early
Implementing an environmental review early in grants application process or project planning is the recommended approach and will prevent unnecessary costs, delays, and impacts. Consideration of environmental concerns and constraints associated with a particular site, approach, health care activity, engineering concept, or field operations early in the planning process allows IHS and grantees to:

- Determine to what extent NEPA applies and what level of reporting will be required for a particular proposed action and what procedures and documents are necessary
- Investigate alternative proposals before too much effort has gone into planning
- Change the planning and concept or operational requirements to resolve environmental problems rather than compensate for them
- Determine what other environmental statutory requirements apply

It is very important that the potential impacts be analyzed for environmental impacts before the grant is approved or the project is begun. There are no “waivers” for NEPA requirements, which must be completed before a grant is approved and before work of the grant or project is initiated.

Changes in Grant Activities
If you wish to change the type of activity for which the grant was awarded, the IHS must decide if further environmental review is required before approving the change; e.g., transfer of funds or change in activity between non-construction and construction activities. Depending on the activity, you must obtain prior approval from IHS for changes in scope, direction, type of service delivery or training, or other areas that constitute a significant change from the objectives or purposes of the approved project.

Appendix D

Frequently asked questions of Use of Grant Funds

Q: Programs have asked if they can sub-contract with local universities to provide services or expertise to their diabetes program.
A: The answer is **yes.**

Q: Grant programs have asked if they can put some or all of their grant funds into their local IHS clinics to buy medicines or improve clinical care (such as buy eye glasses and special shoes, buy diabetes supplies, contract for podiatry or nutrition specialists, etc.
A: The answer is **yes.**

Q: Programs who have used their original diabetes funds to start school health, community screening and primary prevention programs have asked if they could use some of the new funds to expand their clinical activities by starting a new diabetes clinic
A: The answer is **yes.**

Q: Several programs have asked if grant funds can be used to support dialysis centers and services.
A: The answer is **yes.**

Q: Grantees have asked if they can use some of their unobligated funds to re-focus their direction from clinical services to physical activity programs for children.
A: The answer is **yes**. Grant programs are not locked into their original objectives. They can choose to develop new activities with their grant funds, as long as they write new objectives and a budget, and then work through their project officer.

Q: One grant program asked if they can construct a new building to house a wellness center on the reservation with SDPI grant funds.
A: The answer is **no**. Grant funds cannot be used for new construction. They may, however, be used to renovate an existing structure.

Q: Several programs have asked if grant funds can be used to purchase playground equipment or exercise facility equipment.
A: The answer is **yes.**

Q: Numerous programs have asked if the grant funds can be carried over into the next years budget period.
A: The answer is **yes.**

Appendix E

Diabetes Indian Health Best Practice Models

This section gives you several one-page outlines of updated diabetes best practices models. The best practice outlines may help your program:

- Identify strengths in diabetes services and resources for your community.
- Find gaps in diabetes services or programs.
- Establish program priorities.
- Find best practice models that could work in your community.
- Begin a work plan to develop your local best practice models.

Here is a list of the Best Practice topics that follow:

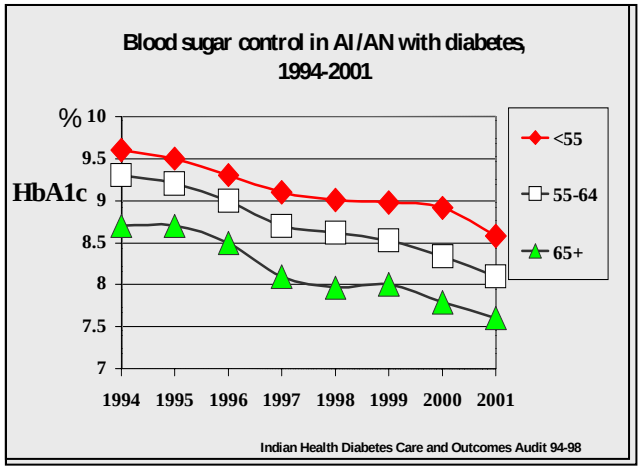
- Basic Diabetes Care and Education – A System Approach
- Diabetes Screening Programs
- Community Advocacy
- Medications for Diabetes Care
- Cardiovascular Disease and Diabetes – Screening, Treatment and Follow-up
- Eye Care for People with Diabetes – Screening, Treatment and Follow-up
- Foot Care for People with Diabetes – Screening, Treatment and Follow-up
- Kidney Disease – Screening, Treatment and Follow-up
- Dental Care for People with Diabetes - Screening, Treatment and Follow-up
- Pregnancy and Diabetes – Screening, Management and Follow-up
- Type 2 Diabetes in Youth – Prevention and Screening
- Diabetes Self-Management Education
- Nutrition and Physical Fitness Programs for People with Diabetes
- School Health – Physical Activity and Nutrition

Indian Health Best Practice Model

Basic Diabetes Care and Education-A Systems

Why is this important?

Indian health and national studies show that diabetes programs using a systems approach to diabetes care and education can make a difference! Indian health diabetes programs have helped define the elements that point to quality diabetes care and education systems within American Indian/Alaska Native communities. A systems approach includes case management, information management, diabetes team, diabetes clinics and protocols, self-care management education, professional training, and resources for care of diabetes complications. Programs looking to improve any part of the way they deliver care and education can use the systems approach.



What measures are used?

- The **Diabetes Quality Improvement Project (DQIP)** is a national diabetes performance and outcome measurement set. DQIP will help health care systems across the U.S. improve diabetes care.
- **Indian Health Diabetes Care and Outcomes Audit** is very similar to the DQIP measures. The graph shows a steady improvement in blood sugar control in Indian health patients with diabetes (lower HbA1c means better blood sugar control). Diabetes teams who improve systems of care will see positive outcomes.

Basic Diabetes Care and Education

- **Assess your local diabetes care and education programs. What types and level of services are you providing? Does the diabetes team accept diabetes care and education standards?**
- **Does your clinic participate in the Diabetes Care and Outcomes Audit? How do the audit measures compare with the Indian Health trends, DQIP measures and Healthy People 2010 objectives? What system improvements can the diabetes team make?**

You may find that your program wants to modify or create new systems of diabetes care and education. Here are some things to consider:

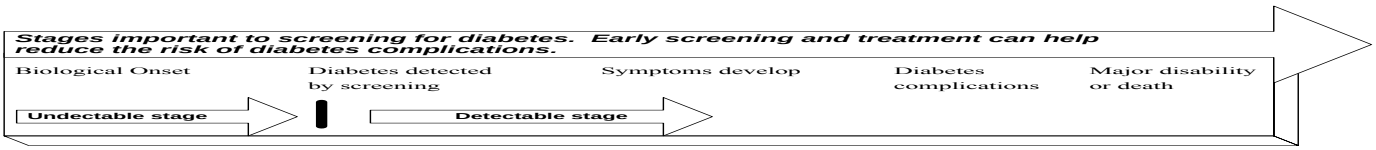
- What elements of medical care do you provide in your program? What kinds of diabetes care systems are in place? What systems would you like to modify or add?
- Do you have staffing for the services you would like to provide? Does your program use a team approach to care? Is training provided for team members on a regular basis?
- Assess your diabetes self-management education program. Does it follow a defined curriculum? Does it teach coping skills? Does it offer support groups?
- Consider using the *Integrated Diabetes Education and Clinical Standards for American Indian and Alaska Native Communities* to assess your local diabetes care and education programs. This document will help you assess your program according to levels and determine what is working and where improvements are needed. Certification is now available that allows your program to receive Medicare reimbursement for eligible patients.

Indian Health Best Practice Model

Diabetes Screening Programs

Why is this important?

Type 2 diabetes has reached epidemic proportions in American Indian and Alaska Native (AI/AN) communities. AI/AN have nearly three times greater chance of dying from diabetes and its complications than non-Hispanic whites. Yet, many people with diabetes, about 33% according to national estimates, remain undiagnosed. Blood vessel damage from high blood sugar can begin before diabetes is diagnosed, leading to early problems with the eyes, nerves, kidneys, and heart.



What do we know?

- Major risk factors for type 2 diabetes such as a family history of diabetes, obesity, impaired glucose tolerance, and a history of gestational diabetes are well known, and the criteria for diagnosis of diabetes are established.
- A large clinical study, the Diabetes Prevention Program (DPP), was ended a year early in July 2001. The purpose of this study was to find out if people at high risk for type 2 diabetes with a condition known as prediabetes could decrease or delay the onset of diabetes through lifestyle changes and/or use of medicine. Participants who made lifestyle changes reduced their risk of getting type 2 diabetes by **58%.** Those on metformin, a medicine used to treat diabetes, reduced their risk of getting type 2 diabetes by **31%.**
- A recent study in Finland also showed that healthy lifestyles changes reduced the chance of getting type 2 diabetes by 58%.
- The **Healthy People 2010** objective advises that 80 percent of adults aged 20 years and older are screened for diabetes.

Diabetes screening in your community

- **Find out the kinds of screening programs and methods operating in your community. Can you make any improvements?**
- **Do your screening programs include diabetes awareness and education?**

Your program may want to develop or improve a diabetes-screening program. Here are some things to consider:

- Find out acceptable methods and approaches for screening in your community. Work with your tribal administration and health care providers to set up appropriate screening programs.
- Screening for pre-diabetes in your community may best be done through the use of a risk assessment questionnaire, prior to subjecting your patients to blood testing.
- Facilitate and ensure access to screening services.
- Provide education to your community about the symptoms of and risk factors for diabetes and the importance of early diagnosis. Involve community leaders in the process.
- Develop a system for tracking and providing follow-up for people with abnormal screening results or with one or more risk factors for diabetes.
- Develop a complete program including screening for diabetes, and screening for other factors that contribute to diabetes complications (lipids, blood pressure, foot exams, etc.).

Indian Health Best Practice Model

Community Advocacy -Winning Support for Your Diabetes Program

Why is this important?

Community support is vital for your program success. Involving tribal leaders, elders, religious or traditional leaders, people with diabetes, youth leaders, community health representatives (CHRs) and other community advocates is the best way to gain support. Community members who are involved as partners, advocates or participants in activities can help listen, influence, identify gaps, and find solutions to the many challenges in diabetes care. They can also help blend traditional or local ways of sharing information and learning with current science and medical knowledge. Honoring traditions and local knowledge can help protect and promote health for the entire community.

"Education is the biggest part of dealing with diabetes. Getting the people to understand and it's their own native people that are going to have to educate us. If somebody comes from off the reservation I guess they don't take them seriously."

Lawrence Bedeau, Red Lake Band of Chippewa, 55 years old, diagnosed with diabetes in 1974

What can you do?

Work with community members to help create and **fine tune** diabetes program activities.

- Encourage, train and use community members to lead diabetes program activities.
- Community members can lead support groups, organize screening programs, teach cooking classes, help with home visits and increase community awareness for diabetes prevention and treatment.
- Create partnerships with other health care programs in your community.

Your community

- **What efforts has your community made to support lifestyle change?**
- **Do you plan activities according to seasons or events important to the people in your community?**
- **How is your program developing and supporting leadership within the community?**
- **What special efforts has your program made to help people learn in the way they are most comfortable with?**

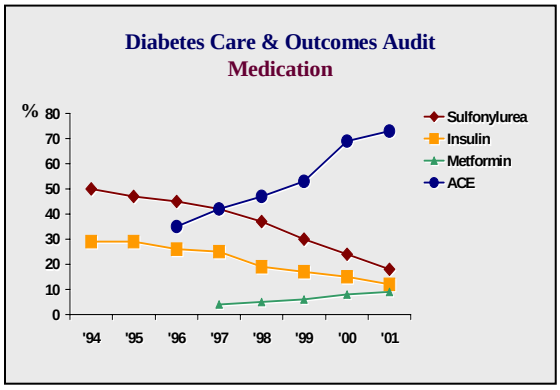
You can involve your community in many ways. Here are some things to consider:

- Listen to your community. What does your community want? Ask how to involve people, programs or leadership in program planning, developing, and implementation. Invite participation from all levels in your community.
- Involve your tribal health advisory system and other tribal health programs (Head Start, WIC, School health, Elder, Youth, etc). Create diabetes prevention and care programs that are complementary not competitive.
- Find ways to share information with the community as your program progresses.
- Consider developing a diabetes advocate program to help support and sustain your community linkages. Adopt or modify diabetes advocate models known to work.
- Consider partnerships with tribal colleges or other education systems in your region. They can help educate and train youth, advocates and other community members.

Medications for Diabetes Care

Why is this important?

Most people with diabetes need medicines to lower blood sugar and prevent diabetes complications. In recent years, a number of new, more effective, drugs have been developed for type 2 diabetes. These drugs act in different ways to lower blood sugar and improve insulin usage. New drugs to control blood pressure and blood lipids are also available to help reduce the risk for heart and kidney disease. Unfortunately, the cost of these drugs may inhibit their widespread use in American Indian/Alaska Native communities with large numbers of people who have diabetes. Indian health pharmacy budgets remain flat line while drug costs increased 25% last year alone. To provide quality diabetes care, health care providers must have access to the necessary tools, including effective medicines.



What measures are used?

- The **Indian Health Diabetes Care and Outcomes Audit** measures the number of people using medicine for blood sugar control and to protect their kidneys. The graph shows the trends in medicine use.
- The **average cost of drugs** for one person with diabetes is about $2,000 per year. These are drugs used to lower blood sugar, blood pressure and blood lipids and to protect kidney function. Other drugs for heart, mental health or other problems are not included.

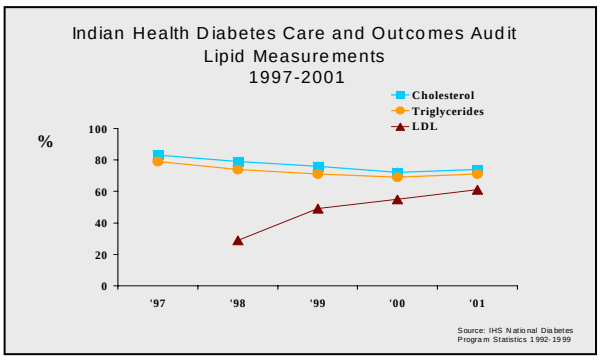
How does your program compare?

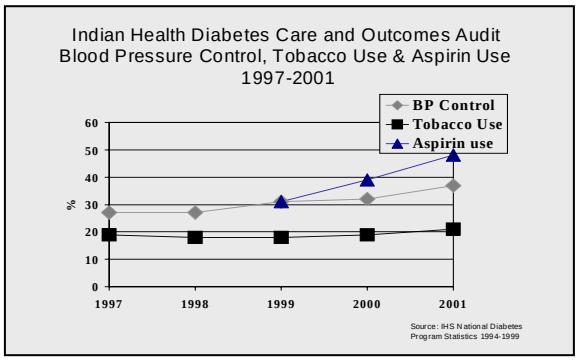
- **Find out your clinic's current budget for diabetes related drugs. Is it enough?**
- **Is your health care team limiting the use of certain drugs due to high cost?**
- **Look at your audit trends, would the outcomes be better if other medicines were available?**

Contributing grant funds to the pharmacy budget may help with diabetes care in your community. Here are some issues you may want to consider:

- How much does your program spend on diabetes medicines per person, per year? If you had more funds, would more people receive needed medicines? Would more funds impact the availability of medication?
- Is your present pharmacy program meeting the needs of your community? Are all people with diabetes who need blood pressure or lipid lowering drugs receiving them? How would more funds affect these needs?
- Are the new drugs for type 2 diabetes available in your pharmacy?
- Are people with diabetes receiving adequate education/information on how to take their medicines?
- Is your clinic staff, including physicians and pharmacists, up-to-date on new medicines and how to prescribe them?

tes. They also are more likely to die after a first heart attack. Cardiovascular disease (CVD) is the leading cause of death in American Indians and Alaska Natives over age 55. Risk factors for CVD include high lipid levels, high blood pressure, tobacco use, obesity, and low physical activity.





What measures are used?

- The **Indian Health Diabetes Care and Outcomes Audit** measures total cholesterol, LDL, triglycerides, blood pressure (BP), tobacco use and recommendation or referral for tobacco counseling; use of low-dose aspirin; and baseline ECG. The graphs show the reported trends in CVD risk factor measurements, for Indian health clinics that report data.
- The **Healthy People 2010** objective calls for a 10 percent reduction in cardiovascular deaths in people with diabetes.

How does your program compare?

- **Find out your clinic audit results for CVD risk factors in people with diabetes.**
  - **What percentage of people with diabetes have their lipid numbers in the target range?**
  - **What percentage have their blood pressure in the target range?**

Your grant program may want to develop a CVD risk screening and treatment program. Here are some things to consider:

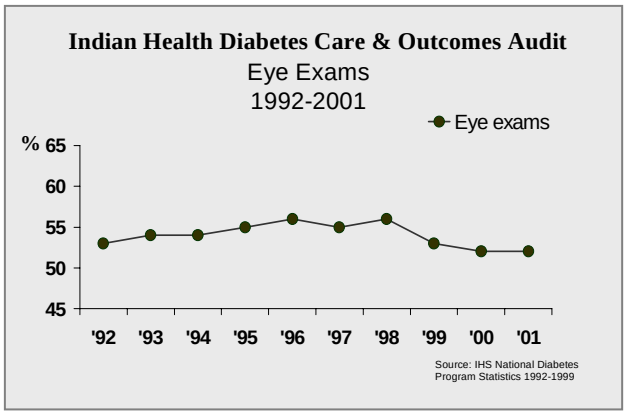
- Assess local diabetes care for CVD screening and treatment services. Are there unmet needs?
- Identify ways to reach your target populations for assessment and treatment.
- Develop lifestyle, counseling and education programs to lower CVD risk.
- Develop a system of care that includes screening, treatment and follow-up services for CVD risk factors (i.e., lipids, blood sugar, blood pressure, and tobacco use).
- Include lifestyle change (nutrition, physical activity, tobacco cessation) programs.
- Promote a team approach in your clinic that involves primary care providers and allied health care staff such as pharmacists, nutritionists, health educators and physical therapists.

Indian Health Best Practice Model

Eye Care for People with Diabetes – Screening, Treatment, and Follow-Up

Why is this important?

Diabetic eye disease (retinopathy) is the leading cause of adult blindness in the U.S. Damage to the eyes can begin even before diabetes is diagnosed. All people with type 2 diabetes should receive a dilated eye exam at diagnosis and every year thereafter. Yearly dilated eye exams need to be done by an ophthalmologist, optometrist or specially trained technician. This annual exam screens for retinopathy. Without treatment, people with diabetes who have eye disease have a 50 percent chance of blindness in 5 years. With laser treatment, the chance of serious vision loss is reduced to less than 2 percent in these same people with high-risk diabetic eye disease.



What measures are used?

- The **Indian Health Diabetes Care and Outcomes Audit** measures the number of people with a documented dilated eye exam or fundus photograph within the past year. The graph shows the reported trends in yearly-dilated eye exams for all Indian health clinics that report audit data.
- The **Healthy People 2010** objective advises that at least 75 percent of people with diabetes receive a yearly-dilated eye exam.

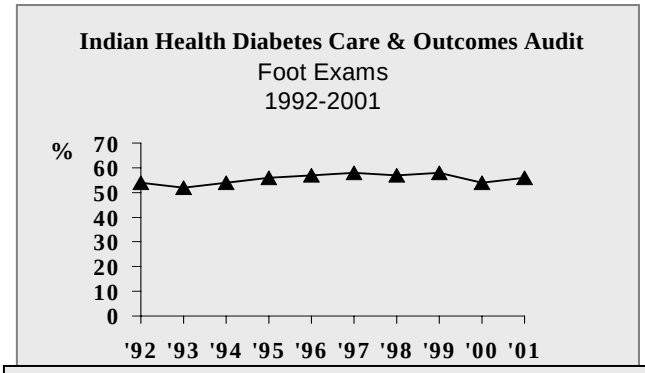
How does your program compare?

- **How do your numbers clinic audit results for last few years?**
- **Find out your numbers in here: _____% FY97 _____%FY99 ____%FY2000 ____%FY2001**
- **How do your numbers compare to the Indian he**
- **How do your numbers compare to the Healthy P**

If your numbers are low, your diabetes grant program may want to develop an eye care program. Here are some things to consider:

- Assess your local eye care program for people with diabetes. Are there unmet needs?
- Identify ways to increase the number of dilated eye exams. (media, eyeglasses, off site screening, telemedicine, etc.)
- Ensure easy access to eye exams, including staffing, space, equipment, or off-site facilities for community-based screening.
- Provide education to people with diabetes and their families about the need for yearly eye exams.
- Provide timely treatment of eye disease including laser therapy, corrective eyeglasses, and other treatments if needed.
- Establish and maintain tracking and monitoring programs for people with diabetes to help track diabetes care and treatment needs.

Lower-extremity amputations are a major cause of morbidity and mortality for people with diabetes, especially in American Indian and Alaska Native communities. Most amputations result from problems with foot ulcers. We can prevent amputations by screening and managing the risk factors for foot ulcers. All people with diabetes should receive a complete foot exam at least once a year to identify high-risk foot problems. A complete foot exam includes recording any history of foot problems, a visual check, testing for nerve problems and blood vessel problems.



What measures are used?

- The **Indian Health Diabetes Care and Outcomes Audit** measures the number of people with a complete foot exam within the past year (includes assessment of nerve and blood vessel status). The graph shows the reported trends in yearly foot exams for all Indian health clinics that report audit data.
- The **Healthy People 2010** objective advises that 75 percent of people with diabetes receive a complete foot exam each year.

How does your program compare?

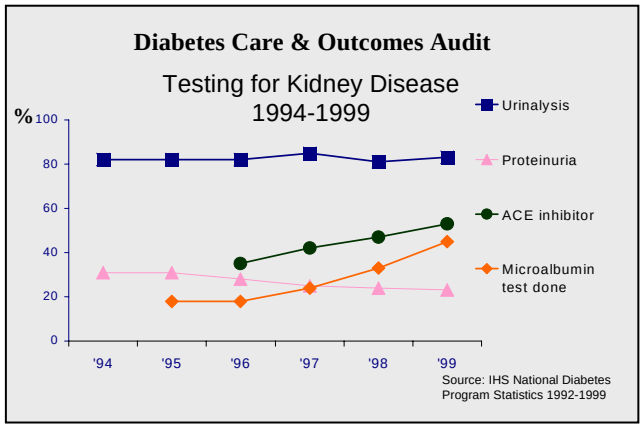
- **Find out your clinic audit results for foot exams during the last few years.**
- **Write those numbers in here: _____% FY97 _____%FY98 _____%FY99 ____%FY2000 ____%FY2001**
- **How do your numbers compare to the Indian health trends?**

If your numbers are low, your diabetes grant program may want to develop a foot care program. Here are some things to consider:

- Assess your local foot care programs for people with diabetes. Are there unmet needs?
- Identify ways to reach your target populations to increase the number of foot exams.
- Provide education on the importance of daily foot care, preventing minor foot trauma, shoe selection and use, and reporting any foot problems.
- Develop a comprehensive foot care program that includes screening and risk assessment, preventive care, wound management and follow-up.
- Provide staffing and training for foot care programs, including CHRs, primary care providers, nurse educators, podiatrists, wound care specialists, and pedorthists.
- Promote case management and treatment of other health conditions such as high blood sugar, tobacco cessation programs and blood vessel disorders.

Why is this important?

Diabetes is the most common single cause of kidney failure in the U.S. The presence of protein in the urine marks the beginning of kidney damage that progresses over time. People with diabetes need yearly urine and blood tests to screen for early kidney disease. Improving blood sugar control, using aggressive treatment to control high blood pressure, and using medicines called ACE inhibitors can protect kidney function.



What measures are used?

- The **Indian Health Diabetes Care and Outcomes Audit** measures screening for protein in the urine (urinalysis & micro albumin tests). The audit measures the percentage of people with diabetes who have protein in the urine (≥300 mg/dl), and the percentage of people with diabetes being treated with ACE inhibitors. The graph shows the reported trends in testing for kidney disease, for all Indian health clinics reporting audit data.

- The **Healthy People 2010** objective is to increase the number of people with diabetes who obtain an annual urine test for micro albumin (small amounts of protein in urine).

How does your program compare?

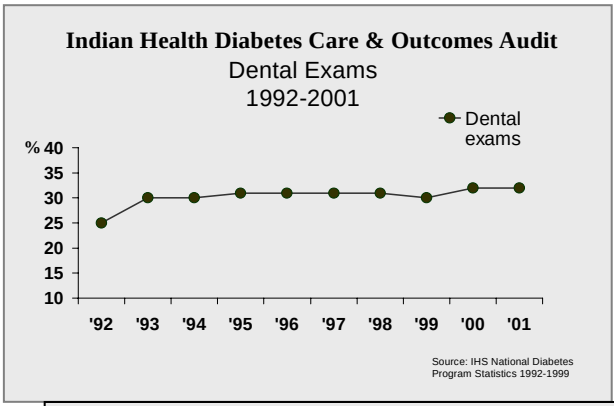
- **Find out your clinic audit results for kidney disease scree years.**
- **Write those numbers in here: _____% FY97 _____%FY9 FY2000 _____%FY2001**
- **How do your numbers compare to the Indian health trend**
- **How do your numbers compare to the Healthy People 201**

If your numbers are low, your diabetes grant program may want to develop a diabetes kidney program. Here are some things to consider:

- Assess your local kidney screening programs. Are there unmet needs?
- Identify ways to reach your target populations for annual screening for kidney disease
- Educate people with diabetes and their families about the need for blood pressure control including lifestyle modifications and medications to control blood pressure.
- Implement a "staged kidney management" approach in your clinic, with protocols for education, interventions and management at each stage. The National Kidney Foundation as the Kidney Disease Outcomes Quality Initiative is developing standards of care for chronic kidney disease.
- Provide training in kidney disease screening, treatment and follow-up to all members of the team.
- Promote case management and treatment of other conditions that affect kidney health such as high blood pressure and high blood sugar.

Why is this important?

Periodontal (gum) disease poses a serious threat to dental health and is the leading cause of adult tooth loss in the U.S. Periodontal disease is often present before the diagnosis of diabetes. All people with diabetes should have a dental exam at diagnosis and continue with an annual exam that screens for gum disease and other dental problems, thereafter. Taking care of the dental needs of people with diabetes can prevent gum disease and tooth loss.



What measures are used?

- The **Indian Health Diabetes Care and Outcomes Audit** measures the number of people with a dental exam within the past year. The graph shows the reported trends in yearly dental exams (for all Indian health clinics reporting audit data).
- The **Healthy People 2010** objective advises that 75 percent of people with diabetes receive an annual dental exam.

How does your program compare?

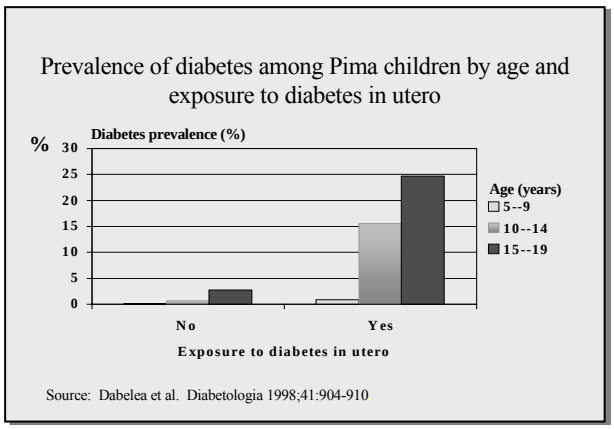
- **Find out your clinic audit measures for dental exams during the last few years.**
- **Write those numbers here: ____ % FY97 ____ % FY98 ____ % FY99 ___ % FY2000 ___ % FY2001**
- **How do your numbers compare to the Indian health trends?**
- **How do your numbers compare to the Healthy People 2010 objective?**

If your numbers are low, your diabetes grant program may want to develop a diabetes dental program. Here are some things to consider:

- Assess your local dental care program for people with diabetes. Are there unmet needs?
- Identify ways to increase the number of people who receive yearly dental exams.
- Develop a program that improves access to dental exams, including staffing, (dentists, dental hygienists, assistants) space, equipment and special needs.
- Provide education to people with diabetes and their families about the need for yearly dental exams.
- Provide timely treatment of periodontal (gum) and dental problems, including crowns and bridgework when needed.
- Promote care and treatment of other conditions such as high blood sugar, high blood pressure and tobacco cessation programs.

Why is this important?

Diabetes in pregnancy poses risks for both mother and baby. Pregnant women with diabetes and their babies are at greater risk for complications during pregnancy than are women without diabetes. Careful management of diabetes during pregnancy, including early screening for gestational diabetes, reduces the risk of complications for mothers and babies. After pregnancy, women who have a history of gestational diabetes and their offspring are at risk for developing type 2 diabetes, obesity, and insulin resistance in later years. Early screening and careful management of diabetes in pregnancy offers the best chance for a healthy mother and baby. Breastfeeding for at least for 2 months may offer some protection against diabetes in the baby.



What measures are used?

- Studies in the Pima Indians show the long-term effects of diabetes during pregnancy. This graph shows the percentage of children who developed type 2 diabetes of mothers who had diabetes during pregnancy. The numbers become greater as the youth enter their teen years.
- The **Healthy People 2010** objective is to decrease the proportion of women with gestational diabetes.

Diabetes and pregnancy in your community

- **Find out your rates of diabetes in pregnancy in your community. What is the trend?**
- **What are the screening and management practices for diabetes in pregnancy in your clinic?**
- **What type of follow-up is available for women with gestational diabetes?**

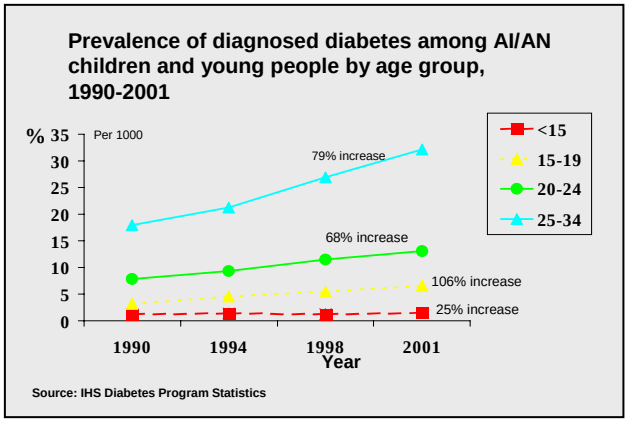
You may find that your program wants to focus on diabetes in pregnancy. Here are some things to consider:

- Develop a program that improves access to pregnancy clinics including staffing, space, equipment, and community-based screening programs.
- Develop diabetes and pregnancy education and awareness programs. Identify ways to reach all women of childbearing age.
- Provide supplies and equipment for blood sugar monitoring.
- Develop programs that provide support, education and reinforcement of lifestyle choices to prevent, manage or treat diabetes in women of childbearing age and their families.
- Establish a multidisciplinary program that includes intense education, management by trained providers, and community involvement. Provide staff training.
- Include community networks that support women and families: preschool programs, feeding programs, Head Start, breast-feeding support groups and WIC.

Type 2 Diabetes in Youth—Prevention and Screening

Why is this important?

Type 2 diabetes is occurring with increasing frequency in children and young adults. Although the peak age of occurrence is usually around adolescence, type 2 diabetes has been reported in American Indian children as young as 4 years. Risk factors for type 2 diabetes in children include obesity or being overweight; inactivity; a family history of type 2 diabetes; type 2 diabetes or gestational diabetes in the mother; belonging to a certain ethnic group, including American Indian; and signs of insulin resistance or conditions associated with insulin resistance such as hypertension, high blood lipids, or irregular menses. In addition, **breastfeeding from birth for at least two months has been shown to be protective against the later development of diabetes.**



What measures are used?

Finding type 2 diabetes in AI/AN youth is not uncommon. A recent IHS study shows that from 1990-2001:

- Among AI/AN youth age 15 to 19 years, diabetes increased by 106%,
- Among AI/AN young adults between 20 and 24 years, diabetes increased by 68%;
- Among AI/AN young adults age 25 to 34 years, diabetes increased by 79%.

How does your program compare?

- **Look at your diabetes registry. Determine your prevalence rates for type 2 diabetes in youth over the past few years. Look at the registry by age groups, sex and community.**
- **How do your numbers compare to the Indian health trends?**
- **Assess your diabetes prevention and screening programs. Are there unmet needs?**

Your program may want to develop or improve diabetes programs for youth. Here are some things to consider:

- Assess your children/youth programs. Encourage information sharing among programs.
- Develop a screening, tracking and referral program for high-risk children (such as those whose mothers had diabetes during pregnancy).
- Promote community and family awareness through special programs in schools, camps, tribal e events, family health programs, and community gatherings.
- Provide training programs on type 2 diabetes in youth for health care providers, social service workers, school and camp personnel, and others who work with families.
- Work with tribal and community leaders, churches, businesses and schools to promote the use of healthy foods and physical activity for all youth in your community.
- Consider breastfeeding promotion as a primary prevention activity.

Diabetes Self-Management Education

Why is this important?

Diabetes self-management education is a key element of diabetes prevention and treatment. People with diabetes and their families need to learn and practice new lifestyle skills. These skills include monitoring blood sugar, making healthy food choices, being more active and reducing risk for diabetes complications. People with diabetes must be active participants in the educational process, setting learning and behavioral goals that meet his or her physical, emotional, and lifestyle needs. Incorporating cultural methods of sharing ideas and skills may be the single, best way of helping people with diabetes and their families learn about diabetes self-management practices.

"If I had it to do all over again, I would follow a path of healthier living. ……...And if I would give advice to anybody, if they know they got diabetes, take care of it , get educated on what it could do."

Courtesy of IHS National Diabetes Program & Nat'l Indian Council on Aging

Lawrence Bedeau, Red Lake Band of Chippewa, 55 years old, diagnosed with diabetes in 1974

What measures are used?

- The **Indian Health Diabetes Care and Outcomes Audit** measures documentation of nutrition, exercise and general diabetes education. Audit trends show that over fifty percent of people with diabetes receive diabetes education each year.
- The **Healthy People 2010** objective advises that 60 percent of people with diabetes receive formal diabetes education.

How does your program compare?

- **Find out your clinic audit trends for nutrition, exercise and general diabetes education.**
- **How do your numbers compare to the Healthy People 2010 Objective?**
- **You can use the Indian Health Integrated Diabetes Education and Care Standards to assess your diabetes education program.**

Your diabetes grant program may want to improve diabetes education services within your community. Here are some things to consider:

- Assess your diabetes education program. You can use the Indian Health Integrated Diabetes Education and Care Standards as a framework for your assessment, (available through the National Diabetes Program Web site-see below).
- Develop a plan to strengthen your diabetes education program based on community needs.
- Identify ways to reach your target populations. Use a variety of education approaches that work in your community—one-on-one, group classes, support groups, talking circles, cooking classes or activity programs.
- Provide needed resources for quality diabetes education: staffing, materials, training, space, etc.
- Involve spiritual and community networks in educational programs. Use respected ways of teaching tradition, cultural values and behavioral practices. Ask community members to share stories or messages about diabetes.

Why is this important?

Nutrition and physical fitness play major roles in helping people with diabetes and their families stay healthy. Investment of time and resources in nutrition, fitness and lifestyle change promises long-term benefits not only for diabetes, but also in reducing risks for heart disease and promoting overall health. Blending traditional and local nutrition and fitness practices may help with needed lifestyle changes for families and communities.

- Involve people in the community in planning, staffing, and teaching nutrition and fitness programs.
- Consider offering programs in schools and work places. Consider offering programs during various times of the day such as after-school, women and infants, elders and other groups.

Nutrition and fitness in your community

- **Look at diabetes rates in your community. What is the trend?**
- **Look at the diabetes audit measures for overweight and obesity, blood sugar control and other measures that nutrition and fitness programs may impact. What are the trends?**
- **Look at what program are currently in place. How can you work collaboratively?**

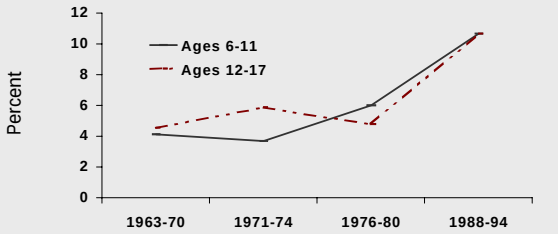
Your diabetes grants program may want to consider a diabetes nutrition and fitness program. Here are some things to consider:

- Assess your local nutrition and fitness programs in your community. Are there unmet needs?
- Facilitate and ensure access to programs including staffing, space, equipment, and off-site facilities for community-based programs.
- Solicit sponsorship for nutrition and fitness programs from employers, supermarkets, churches, and clubs for young people.
- Use traditional ways of sharing and learning new information and practices.
- Train community members as nutrition and fitness leaders.
- Encourage all nutrition and fitness programs in your community to be collaborative not competitive.

School Health – Physical Activity and Nutrition

Why is this important?

The school setting, ranging from preschool to college, can be a successful environment for diabetes prevention activities within the community. Schools can develop effective policies and educational programs that help young people and their families to increase physical activity and to learn and practice healthy eating. Establishing healthy eating and physical activity patterns at a young age is critical. Changing poor eating patterns in adulthood can be difficult.



*Overweight defined by the age- and sex-specific 95th percentile of body mass index (1963-70 data). Source: Trolano RP; Flegal KM. Pediatrics 1998: 101(3):497-504.

What measures are used?

- **Type 2 diabetes** *among adolescents* is linked to the childhood obesity epidemic. According to the American Diabetes Association, more than 85% of all children and adolescents with type 2 diabetes are seriously overweight at the time of diagnosis. The graph shows the increasing percentage of young people who are overweight.
- Nutrition and physical activity patterns contribute to obesity. More than 84% of young people in the U.S. eat too much fat, and more than 91% eat too much saturated fat. Nearly half of American youth, 12-21 years, are not active.
- Implement a curriculum that focuses on increased physical activity and healthy eating.
- Establish non-competitive and competitive physical activity programs for all ages and abilities. Consider after school, summer and family activity programs.
- The **Healthy People 2010** objective specifies that 90 percent of children and youth receive school health education on increase physical activity and 95 percent receive education on healthy dietary patterns.

Your Community

- **How many of your schools provide healthy eating and physical activity education programs?**
- **Write those numbers in here: ____Preschool ___Elementary ___Jr. High ____High School**

If your numbers are low, your diabetes grant program may want to focus on a school health program. Here are some things to consider:

- Assess your local schools. Involve the parents, school staff and community by establishing a school health advisory council to develop a program that works for all.
- Support parents and caregivers by providing guidance in parenting skills along with tools that encourage healthy eating habits and physical activity.

Work with your schools to offer meals and snacks low in fat, sodium, and added sugars.

- Provide training to teachers and food service staff on obesity and its consequences; especially type 2 diabetes of children and adolescents.